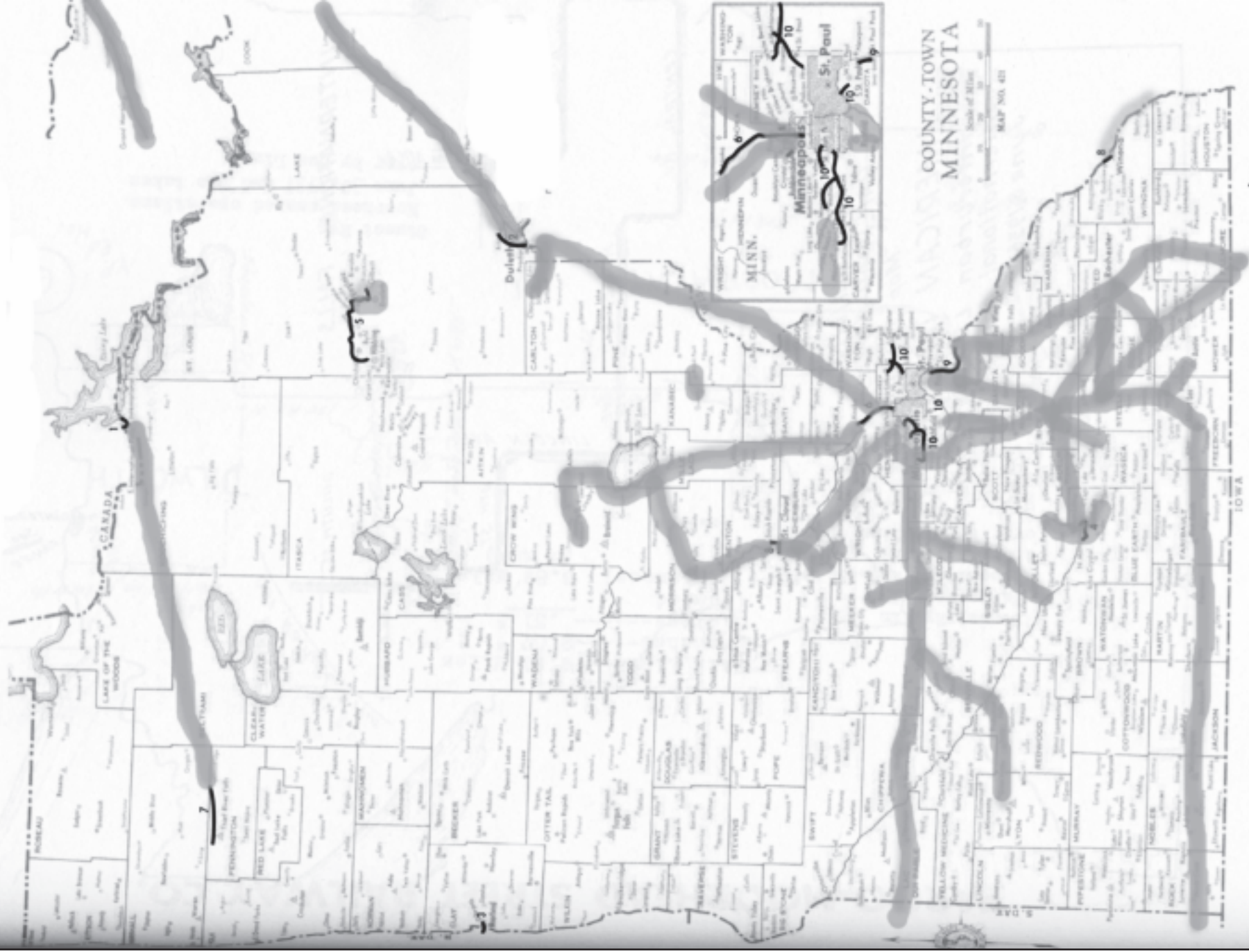




TWIN CITY LINES

Fall 2017

TRANSIT AND INTERURBAN LINES



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The Minnesota Streetcar Museum operates the Como-Harriet Streetcar Line in Minneapolis and the Excelsior Streetcar Line in Excelsior. Its mission is to preserve Minnesota's electric railway heritage.

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Planned but never built

-Aaron Isaacs

In *Rails to the North Star*, Richard Prosser's basic text on Minnesota railroad history, there's an exhibit titled "Other Street and Electric Railroad Companies Incorporated in Minnesota". These were mostly paper companies that never amounted to anything. We know that the promotion of new railroads was often the province of speculators and others who were more optimistic than they deserved to be. This was particularly true of electric lines, whether local streetcars or interurbans between cities. This was a true tech bubble that went crazy between electrification in 1890 and the onslaught of the automobile around 1920. In the case of interurbans, the fever peaked from 1905 to about 1915. 15,000 miles of them were built, only to almost entirely disappear by 1940. Thousands of additional miles were proposed but never happened.

We don't know much about these aborted efforts. However, thanks to the recent availability of online digitized historic newspapers, plus Russ Olson's research papers, there is some rudimentary information. Incorporations of new companies were faithfully reported in the papers. Prosser's list is not completely accurate. A couple weren't trolley lines at all. The Hennepin County Gravity Railway and the Ramsey County Gravity Railway turned out to be amusement park roller coasters.

In several cases the companies were

the false starts to systems that eventually appeared. There were several corporate predecessors to the Mesaba Railway, the interurban than ran the length of Missabe (one of several spellings) iron range

Here's the list of stillborn horsecar, streetcar and interurban companies, including what we know about them including their date of incorporation.

Atlas Engineering and Construction was supposed to build a line in 1913 from Brooklyn Center to Minneapolis.

City Railway Company of Duluth, 11/25/93

This company was granted a charter by the West Duluth city council. West Duluth was soon annexed by Duluth, which failed to approve the charter. End of story.

Cloquet Valley Railroad Company, 6/20/12

All we know about this is the notice of incorporation, which didn't describe the route.

Como Railway Company, 3/30/80 (St. Paul)

This company intended to build from downtown St. Paul to Como Park via Rondo, Dale and Como. Thomas Lowry was its president. It apparently laid some track downtown on 6th Street and Market Street. In 1883 the city told it to remove the track, probably because they weren't operating. The Rondo horse car line actually opened in 1888. Streetcars didn't reach Como Park until 1891, and weren't

laid on Dale Street until 1914.

Duluth and Northern Traction Company, 5/4/11

This is the proposed line to Greysolon Farm just outside the Duluth city limits, near the end of the Woodland line. This company spent several years unsuccessfully lobbying the city and Duluth Street Railway for trackage rights into the city. The Jim Kreuzberger papers contain a thick chron file documenting the several attempts to make it happen. It didn't.

Duluth Electric Railway Company, 4/5/90

This company unsuccessfully proposed to take over the Duluth Street Railway franchise.

La Crosse and Winona Traction Company, 1/31/07

Intended to connect the two cities of its title, it received a franchise from City of Winona in 1907. In 1910 it applied to run through the intermediate town of Galesville, Wisconsin. It was backed by Chicago interurban mogul Samuel Insull.

Mankato and St. Peter Railway and Lighting Company, 3/31/02

Mankato Electric Street Railway Light and Power Company, 6/10/99

Mankato Railway Light and Power Company, 8/2/04

This was another attempt to revive Mankato streetcars after the demise of an earlier company in 1895. It also

Front cover: It's 1891 at the Lakewood Cemetery stop where our line ends today. The line has just been electrified and the Lakewood station constructed. The heavily loaded open car is one of 14 built from a Motor Line narrow gauge open trailer. Dave French found this rare image and the rear cover photo on Ebay.

Inside front cover: This map from Richard Prosser's *Rails to the North Star* shows the interurban and streetcar lines that were actually built (narrow dark lines). Your graphically challenged editor has added fuzzy grey lines to indicate the interurban lines that were proposed but never built. This includes the Dan Patch Line and Luce Line that were indeed built, but never electrified.

proposed an interurban from Mankato to Eagle Lake and St. Clair. Streetcars didn't reappear until 1907.

Mille Lacs and Minneapolis Electric Railway Company, 11/2/04

It planned to build from Aitkin to Lake Mille Lacs, and then to Minneapolis.

Minneapolis and Anoka Electric Suburban Railway Company. 2/24/98

Minneapolis and Anoka Railway Company, 6/14/01

This line proposed to build on the partially completed right of way of the Minneapolis and Champlin Suburban Railway

Minneapolis and Champlin Railway Company, 3/12/86

Minneapolis and Champlin Suburban Railway Company, 8/30/98

This line apparently did some grading before it expired.

Minneapolis and Iowa Electric Railway Company, 1/7/02

Proposed to go from Decorah, Iowa to Chatfield, Minnesota, it may have had designs to reach St. Paul. It did some construction at Fountain. Annual meetings of the stockholders continued for a few years.

Minneapolis Northern Suburban Railway Company, 9/19/10
Minneapolis to Little Falls

Minneapolis & Central Minnesota, 1913

According to a Minneapolis Tribune story, it was planned to go from Minneapolis to Monticello and St. Cloud via Robbinsdale and Champlin. The article claims grading was complete from Robbinsdale to Champlin.

Perhaps that was a leftover from the Minneapolis and Champlin Suburban Railway Company, mentioned above. The promoter promised that service would begin June 15, 1914, but of course it didn't.

Minneapolis & Minnesota Central Traction, 6/28/13

This company proposed to build south from St. Cloud 27 miles to Fairhaven, Kimball and Marty, tapping the Granite District, and eventually to Minneapolis, entering over the Luce Line. It would have used the St. Cloud Street Railway to enter that city.

Minnesota Midland Electric Railway Company, 1/27/02.
Little Falls to Lake Mille Lacs

Minnesota Union Electric Railways (The Garden Route)

Minneapolis to St. Cloud, then to South Dakota.

Mesabe Range Traction Company, 1/27/06

Missabe Electric Railway Company, Nov 1910

Missabe Traction Company, 8/10/06

These appear to be corporate predecessors of the Mesaba Electric which opened in 1912.

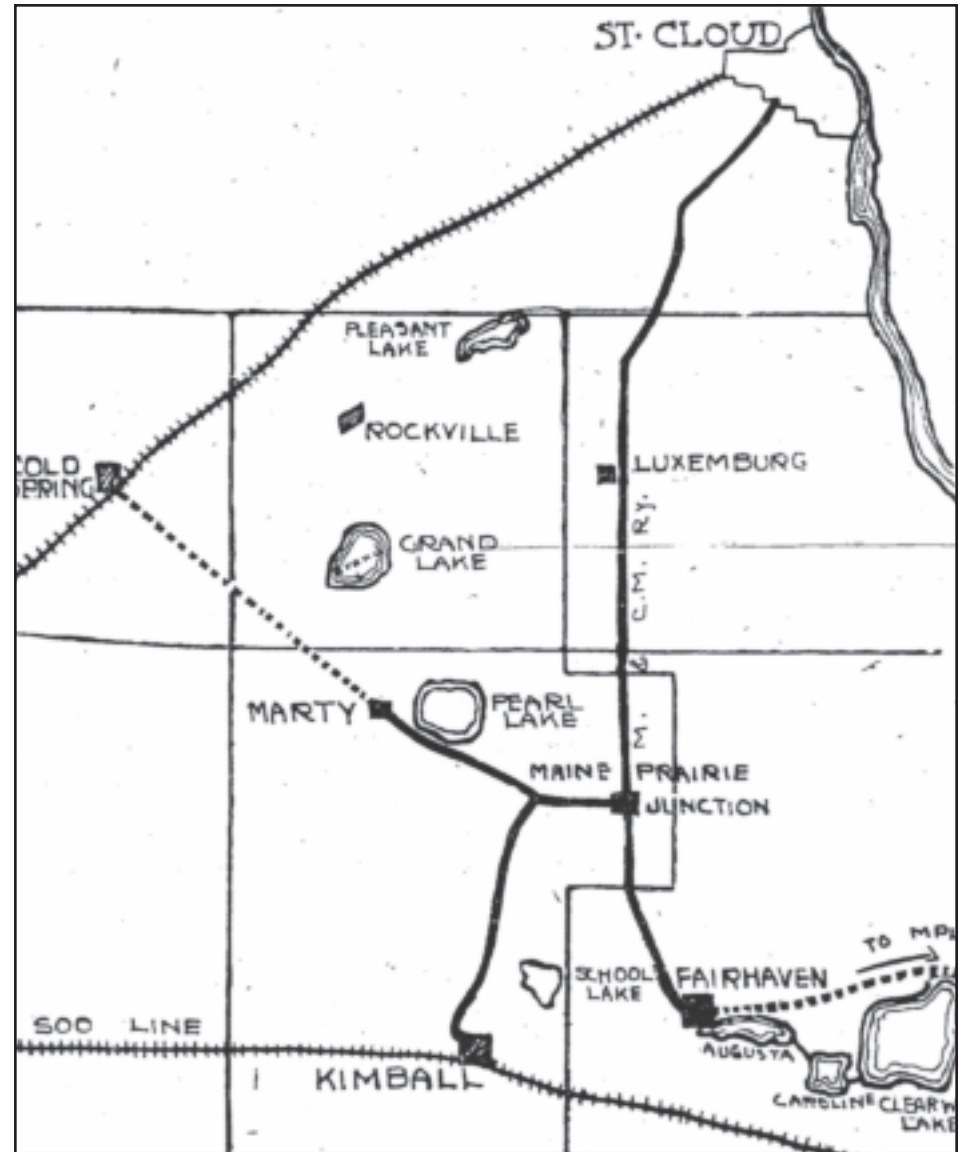
Northern Traction Company, 6/25/06

It built two blocks of track in Hibbing before going under in 1912.

Pioneer Electric Railway Company, 5/20/04

It proposed to build from White Rock (9 miles southeast of Cannon Falls in Goodhue County) to St. Paul

Proctor Bay View Transit Company, 5/27/10



The Minneapolis & Minnesota Central was intended to connect St. Cloud with the nearby granite mining district, along with a vague promise to extend to Minneapolis.

It would have connected the top of the Duluth Belt Line Railway (not the better known 7th Avenue West incline) in Bay View Heights with Proctor, 3 miles away.

Remington Park Railway Company, 4/27/83 (Minneapolis)

This appears to be the origin of the short-lived (1884-1887) horsecar extension to the east shore of Lake Harriet via Bryant Avenue S. and 45th Street.

St. Anthony Railway Company.
1/9/83

A franchise was awarded to run on W. 32nd Street in Minneapolis. From where to where is unclear.

St. Francis Electric Railway Company, 12/12/00

This was to be a 5-mile feeder from St. Francis to Brook Park to connect with the Eastern Minnesota (Great Northern).

St. Paul, Minneapolis and Minnetonka Railway Company, 1/9/84

This was a proposed extension of the Motor Line from Minnehaha Park to St. Paul via Fort Snelling, and across south Minneapolis on Lake Street to connect at Hennepin with the line to Lake Minnetonka.

St. Paul Motor and Horse Railway Company, 8/18/81

It proposed lines on West 7th Street to Fort Snelling and East 7th Street to the Harvester Works beyond White Bear Avenue. These lines were later built by St. Paul City Railway and the North St. Paul Railroad.

St. Paul Railway Promotion Company, 9/21/10

This company proposed multiple lines in southern Minnesota, including St. Paul to Mankato via Northfield and Faribault, St. Paul-Lake City, and St. Paul-Rochester via Hastings.

Sioux Falls and Southern Minnesota Traction Company, 4/22/11

Would have extended from Sioux Falls to Albert Lea, essentially the route of I-90 today.

Superior-Cloquet Electric Railway, 1902

Southern Minnesota Traction Company, 8/19/14

Proposed to build from Faribault to Waseca.

Suburban Traction Company, 6/14/11

Proposed to run from downtown Duluth to Duluth Heights via East 7th Street.

Superior-Cloquet Electric Railway, 1896

Proposed to connect Superior with New Duluth.

Superior Steel Plant Traction Company
Proposed to build to the West Superior steel plant.

Twin City Underground and Elevated Electrical Railway Company,

7/1/08

This is what it sounds like, a subway between the two downtowns.

Virginia, Eveleth and Gilbert Traction Company, 3/15/11

This company was going to compete head to head with the Mesaba Electric between these cities.

Unfinished extensions by companies that actually operated

Twin City Rapid Transit and Duluth Street Railway built extensive systems, but they didn't complete everything that was planned. There was always pressure from the cities to build ahead of development and the companies resisted that, because it was usually unprofitable.

Twin City Rapid Transit

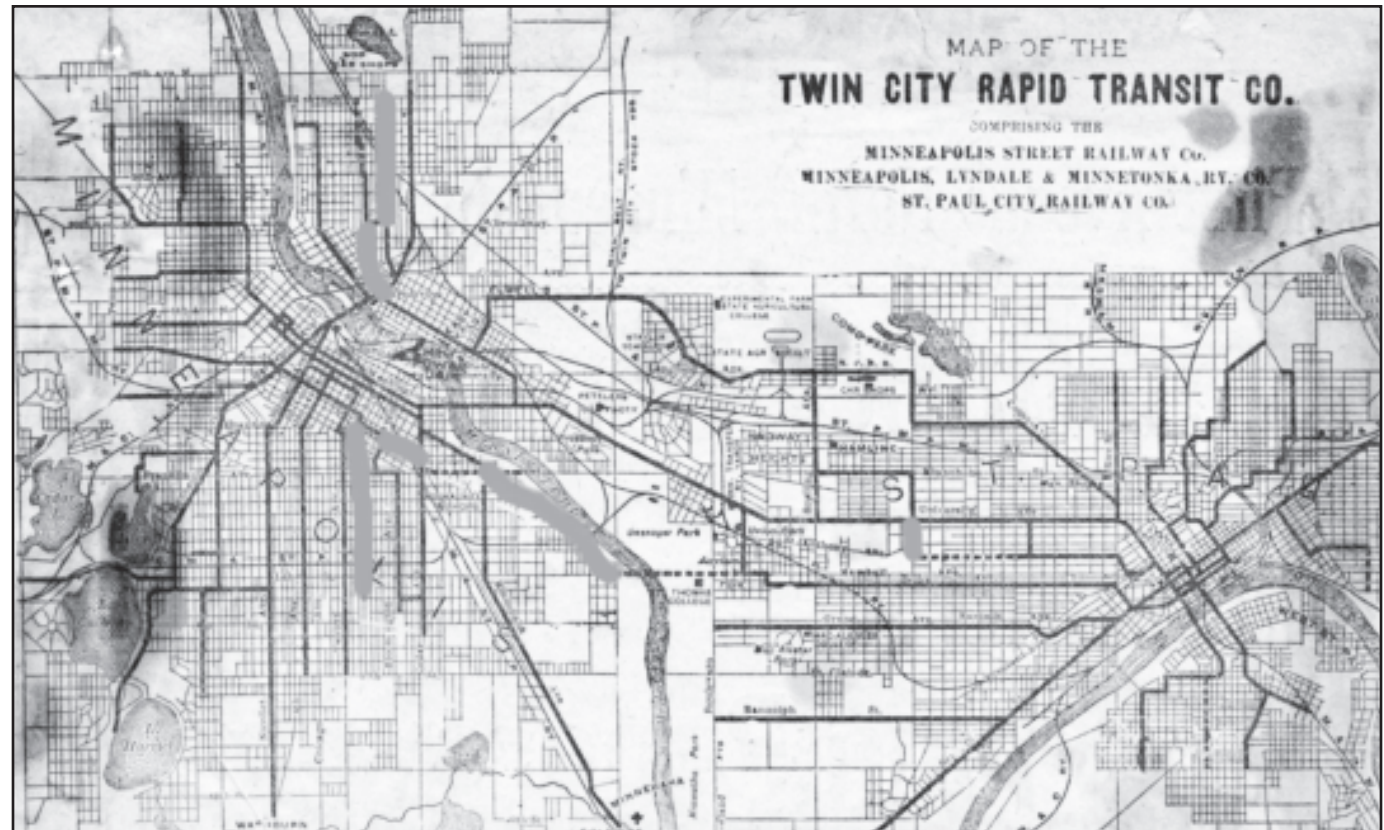
We can pick two points in time to identify proposed extensions that were never built, because we have maps of them. The first is 1894. The second is 1919, when the new Minneapolis streetcar ordinance was passed, with numerous proposed extensions identified with thick grey lines.

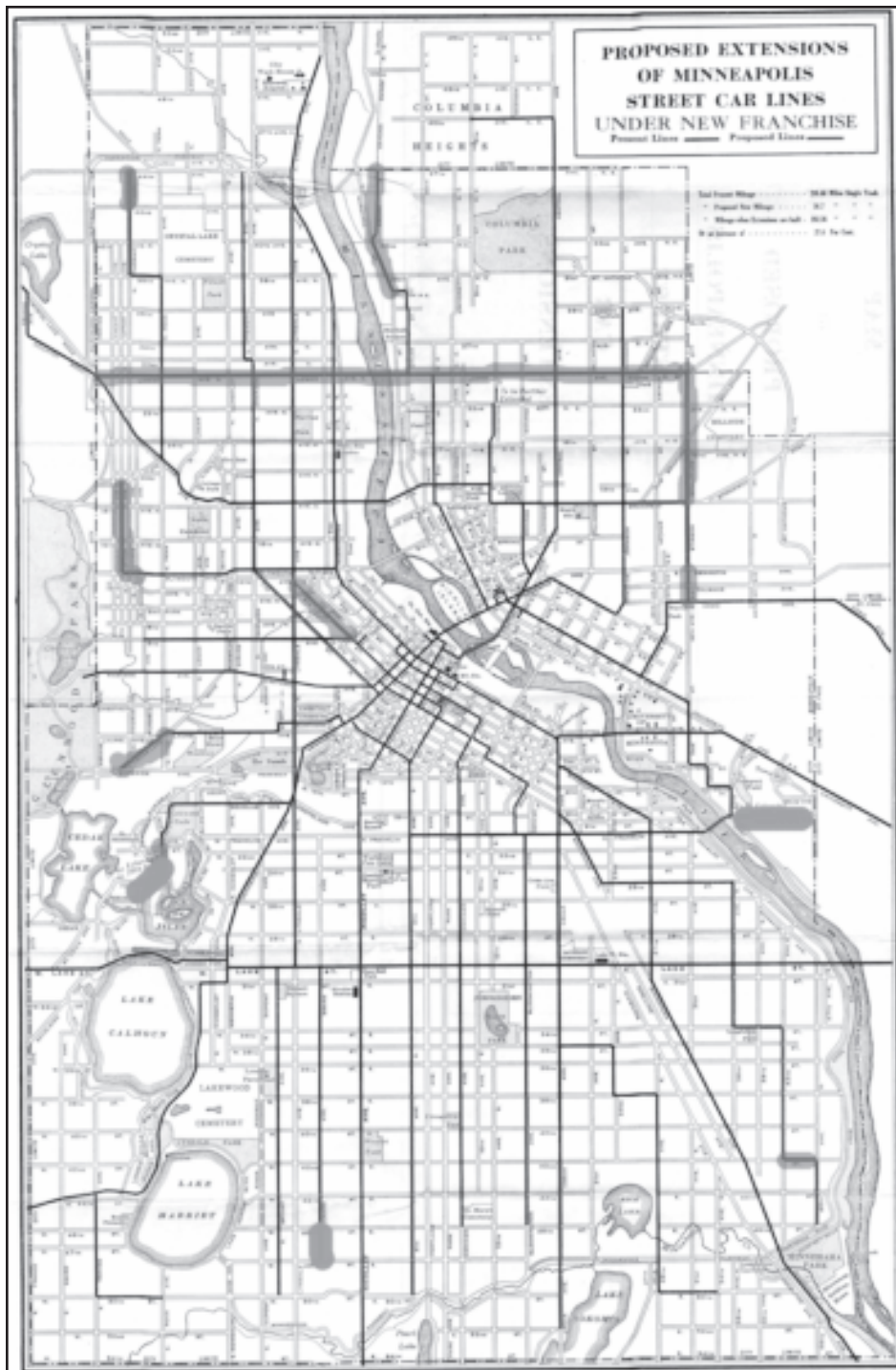
1894

This map (below) shows the following lines that were never built:

The Rondo Avenue line would have been extended north on Chatsworth Street to connect with the old Hamline line, which used Chatsworth, Minnehaha and Snelling to Snelling and Como.

The Selby Avenue line would cross the Mississippi River on the new Lake





Street bridge, then follow West River Parkway to existing trackage on Riverside Avenue.

A new line would extend south from downtown Minneapolis to 32nd Street via 11th Avenue S.

The Monroe Street NE line, which shifted between Monroe and Washington Streets, would become two parallel lines on Monroe and Washington, both ending at what is now Lowry Avenue.

The Lake Harriet line would be rerouted down Hennepin Avenue to 34th Street, then west to Lake Calhoun.

1919

The map at left shows the lines proposed under the new Minneapolis ordinance. Those highlighted in grey were never built.

-Extension of the Plymouth Avenue line from Sheridan to Upton, and north on Upton to McNair, just beyond Golden Valley Road.

-Extension of the Penn Avenue line on Thomas from 42nd to 44th Avenue N.

-Extension of the Oak Street line to the St. Paul city limits, route not designated.

-Extension of the 4th Avenue S. line from 48th to 50th Street.

-A Stinson Boulevard line from Como Avenue to Broadway, then west on Broadway to Jackson Street NE, where it would meet the Broadway Crosstown. Only the track on Stinson from East Hennepin to Broadway was actually built.

-Extension of the Kenwood line from 21st and Penn to 26th Street, route not designated. This eventually became a bus route.

-Extension of the 2nd Street NE line

local service over the Minneapolis Anoka & Cuyuna Range to the city limits at 37th Avenue NE.

-A new line crossing the city on Lowry Avenue from the Robbinsdale city limits at Victory Drive to Stinson Boulevard, then south to Broadway. This eventually became a bus route.

-On Stinson Boulevard from Como to East Hennepin. The Stinson line was actually built on East Hennepin.

-On 42nd Street between 42nd and 46th Avenues S. The line was actually built on 41st Street in 1921.

Duluth Street Railway

-Extensions that were contemplated but never completed included:

-Extension of the Woodland Avenue line to Calvary Cemetery.

-An extension of the 57th Avenue W. line to Bay View Heights and Proctor.

-An extension of the Allouez line to Itasca, WI.

-A line to Morgan Park from Superior. These first four were completed using buses.

An extension of the East 4th Street line to Ridgeland Road, a few blocks beyond the end on track at Wallace Avenue.

The Interstate Traction Company proposed to extend its Park Point line to the Wisconsin shore.

Minneapolis & Northern (later Minneapolis Anoka & Cuyuna Range) had plans to extend beyond Anoka to Lake Mille Lacs in 1914 and the Cuyuna Range in 1915.

St. Paul Southern proposed to build beyond Hastings, its actual terminus, to Rochester with a branch line to Red Wing and Lake City and another to Cannon Falls. Never mind that Cannon Falls already had two steam



railroads.

Northwestern Electric Railway was originally proposed to go 150 miles from Thief River Falls to International Falls through impenetrable peat bogs. Instead, it went 19 miles to Goodridge, MN.

The Minneapolis, St. Paul, Rochester & Dubuque Electric Traction Company, better known as the Dan Patch Line, was a classic promoter's dream. Its route ambitions shifted over time, as the maps reproduced here show. Most of the multiple route plans never came to fruition, including elec-



Above left: The St. Paul Southern connected St. Paul with Hastings, and that was it, despite this map.

Above right: This map, reproduced from the book *The Minneapolis, Northfield & Southern*, by John Luecke and Paul Spyhalski, shows the Dan Patch's ambitions as they appeared in 1906. That would change. Construction started in 1909.

trification itself. It proposed to build to Rochester via Northfield, Faribault and Owatonna, then Dubuque via Decorah, Iowa. It actually reached

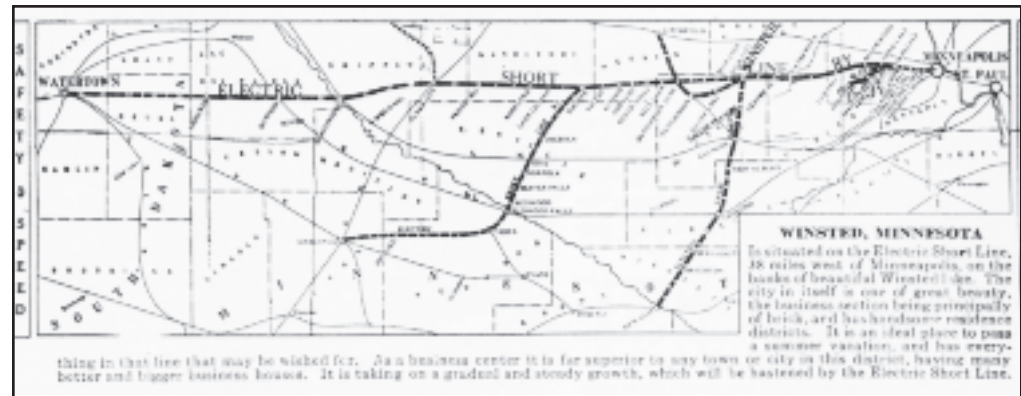
Rochester, Faribault and Mankato via trackage rights over the Chicago Great Western. It did some grading south of Northfield, but that was it.



One of several newer visions of the Dan Patch's proposed future. It actually did reach Randolph, Faribault and Mankato via trackage rights on the Chicago Great Western.



Although it never electrified, the Dan Patch certainly intended to. The idealized electric train above left belonged to the Spokane & Inland Empire.



Electric Short Line (Luce Line) was proposed to reach Watertown, SD, with branches to Litchfield, Marshall and New Ulm (see map above).



-Compiled by Russ Olson

Perhaps the most ambitious of the interurban proposals, it would have constructed a high speed, third rail 129-mile line between Minneapolis and Superior, avoiding all intermediate towns. The entrance to Superior and Duluth would have been over the Duluth Street Railway. 50 miles were actually graded north of the Twin Cities before it quit in 1911. Russ Olson dug through the Electric Railway Review and other sources to assemble this chronology of a failed enterprise.

Incorporated February 28, 1907, in Maine, the corporation filed May 7, 1907, to do business in Minnesota. Authorized capital stock was \$7 million.

ELECTRIC RAILWAY REVIEW May 18, 1907 W. H. Crossland, vice-president, Minneapolis, writes that this company, whose incorporation was noted last week, will build a double-track third-rail electric line from Minneapolis and St. Paul, Minn., to Duluth, Minn., and Superior, Wis., 130 miles of which 91 are in Minnesota and 39 in Wisconsin. The road will be practically an air line and will intersect no present towns or villages. Surveys have been made and grading is to begin June 1. No general contracts are to be let. The road is to handle both freight and passengers. Maximum grade, 0.5 percent; maximum curvature, 1½ degrees; weight of rail, 70 pounds. About 4,500 feet of steel will

be required for the five principal bridges, although the company is not at present in the market for equipment. E. W. Farnham of Chicago, president; J. H. Thomas, Minneapolis, chief engineer. Headquarters, 345 Railway Building, Minneapolis.

In a half-page display advertisement in the May 11, 1907, **SUPERIOR TELEGRAM**, the railway announced ambitious plans to build "---an electric double-track high-speed railroad---" between the Twin Cities and the Twin Ports. The "Arrow Line" was to utilize the "Farnham Inverted Protected Third Rail Electric System" devised by E. W. Farnham. "The company has completed preliminary surveys---it has the right-of-way from city limits to city limits. The public will be advised as to terminals." The capital stock offer stated that the investment would "---return to its stockholders annually every promise multiplied the biblical ten-fold."

ELECTRIC RAILWAY REVIEW October 12, 1907 This company, recently incorporated to build a high-speed third-rail interurban railway from St. Paul and Minneapolis to Duluth, Minn., and Superior, Wis., will begin construction of the line at once. Preliminary surveys are now in progress. The line as proposed will be about 130 miles long and will be operated by steam until motive power for the equipment of the road with the Farnham inverted third-rail system can be installed. By the building of this line a reduction of 30 miles will be afforded in the present distance between the points named, and as the route chosen by the new company is the shortest possible one that physical conditions will permit, quick and efficient freight, passenger, mail and express business for the patrons of the road is assured. It is estimated that the



road will cost \$21,500 per mile, or a total of \$2,775,500 when completed. The company is capitalized at \$7,000,000 divided into 10,000 shares of \$100 each.

ELECTRIC RAILWAY REVIEW February 1, 1908 Smith & Jones of Minneapolis have been awarded a contract for clearing and grading for about 30 miles south of the Minnesota-Wisconsin state line near Foxboro. Last year grading was completed from Minneapolis to Sunrise, Minn., 38½ miles. Work under the new contract is to be started at once.

ELECTRIC RAILWAY JOURNAL April 13, 1908, mentioned the electric "Arrow Line" between Minneapolis-St. Paul and Duluth, 129 miles: two hours running time compared to the railroad's five hours. Capital Stock: authorized \$7,000,000; issued \$2,500,000.

ELECTRIC RAILWAY JOURNAL March, 1909 Announcement is made that additional contracts are to be let about April 1 by this company. Contracts have been let as follows: from the lower St. Croix River to upper St. Croix, 33 miles, to Westerdahl & Carlson, and from upper St. Croix to Superior, Wis., 60 miles, to Smith & Jones. Track has already been laid from Minneapolis to Coon Lake, 25 miles (*this didn't actually happen*). Two bridges will be constructed.

ELECTRIC RAILWAY JOURNAL June 26, 1909 MANAGEMENT CHANGE The bond prospectus (foregoing) mentions "former management". It is also signed by L. N. Loomis, President, Twin City & Lake Superior Railway Company. Mr. Loomis was connected with the grain business and for about twelve years

was engaged in the operation of several country elevators. In 1904 he disposed of those interests and established in Minneapolis the Loomis-Benson Company, grain commission dealers. He withdrew from this extensive and prosperous business in 1908 to accept the presidency of the railway.

ELECTRIC RAILWAY JOURNAL July 6, 1910 50 miles of roadway have been graded, some near Minneapolis-St. Paul and the remainder south of Holyoke, Minnesota. It will be a third-rail electric railroad from Minneapolis-St. Paul via Grantsburg, Wisconsin, to Superior, Wisconsin at 21st Street.

THE BOND ISSUE is \$4,000,000: First Mortgage 5 Per Cent—30 Year Gold Bonds, Dated October 1, 1909. Trustee: American Trust and Savings Bank of Chicago. Information from the prospectus:

Work Done The grading is practically completed on the first division—from Minneapolis Belt Line to the first crossing of the St. Croix, 40 miles, and about 10 miles of the heaviest grading completed, or nearly so, on the third division in Pine and Carlton counties, Minnesota. The right-of-way has also been cleared and grubbed on almost the entire third division from Foxboro to the northern crossing of the St. Croix River. The company owns inexhaustible gravel beds on its line at the first crossing of the St. Croix River, which cheaply solves the question of ballast.

ELECTRIC RAILWAY JOURNAL August 28, 1910 A new survey relocated the route from Foxboro, Wisconsin, to 64th St. and Tower Ave., Superior, Wisconsin. A description of the route was given. On Central Ave N.E. from the Minneapolis city limits; north to Moore Lake; northeasterly

around the east shore of Moore Lake to the west shore of Coon Lake; a 90 degree curve near the northwest shore of Coon Lake; then northeasterly through North Branch, Minnesota, to Grantsburg, Wisconsin; northerly to Holyoke, Minnesota, northwesterly to Foxboro, Wisconsin, and northeasterly to 64th St. and Tower Ave., Superior, Wisconsin.

I had copied the following paragraphs from a county historical publication but I apparently neglected to identify the source.

Promoted by the Western Land & Improvement Company, Minneapolis, this road was to run north from the Twin Cities crossing the Great Northern Railway at Stacy, then northeast across Chisago County to Sunrise, Minnesota, on the St. Croix River where a bridge would span the river valley. Entering Wisconsin the line would proceed to Grantsburg, then to the proposed town of Montgomery just west of Yellow Lake in Burnett County. The railroad would then continue back across the St. Croix River into Pine County entering at Crosby Township and then north through Ogema and to the Ojibway village on the Tamarack River in Wilma Township. From that point it would head north to the platted town of Duxbury, which was the railroad "headquarters". The Duxbury Village plat was located about two miles east of the present Duxbury community. After leaving the Duxbury depot the train would next stop at Whelans, a proposed village in Keene Township. Leaving Keene Township the line would continue into Park Township to the platted town of Silverton and future town of Otto. Entering Nickerson Township the line would veer to the northeast where Copper

City was to be established and then into Carlton County and finally Superior, Wisconsin.

The Promotion Company acquired 150,000 acres to support the right-of-way and land sales of farmland and townsites along the way. They sold capital stock through the Western Surety and Adjustment Company, Minneapolis, [Fiscal Agent] to finance the venture. Agents were selected along the route to sell the land, and bonuses were paid to the most successful.

Townsites were platted along the way, the owners sure that their lots would soon be sold at a good profit.

The Promotion Company advertised widely and did sell enough capital stock to start the project but not enough to see it through. The line was surveyed and much of the right-of-way roughed in. Townsites were platted, lots sold, and at least one hotel was built, the Silverton Hotel in Park Township. The hotel was later abandoned and destroyed in a grass fire.

Reading through the correspondence between the railroad and its stockholders it appears that construction continued until the spring of 1910. In 1911 there was no activity and no plans to continue. In the file there were letters from stockholders demanding that construction begin again, and letters from townsite promoters fearful that they had been left "holding the bag".

In 1911 the Soo Line Railroad was constructed serving the same general area. This sealed the fate of the Arrow Line. In 1912 stockholders were unloading their stock.

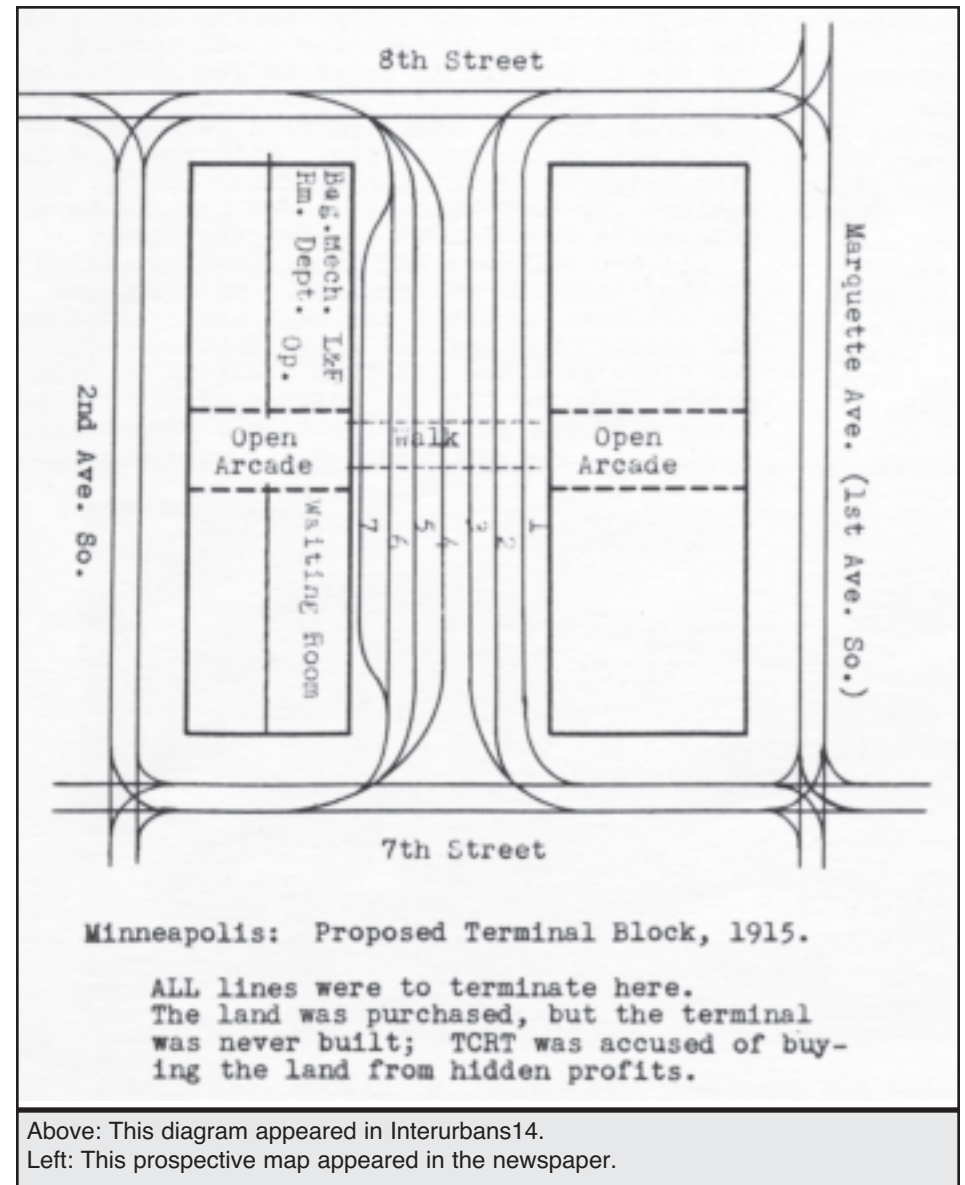
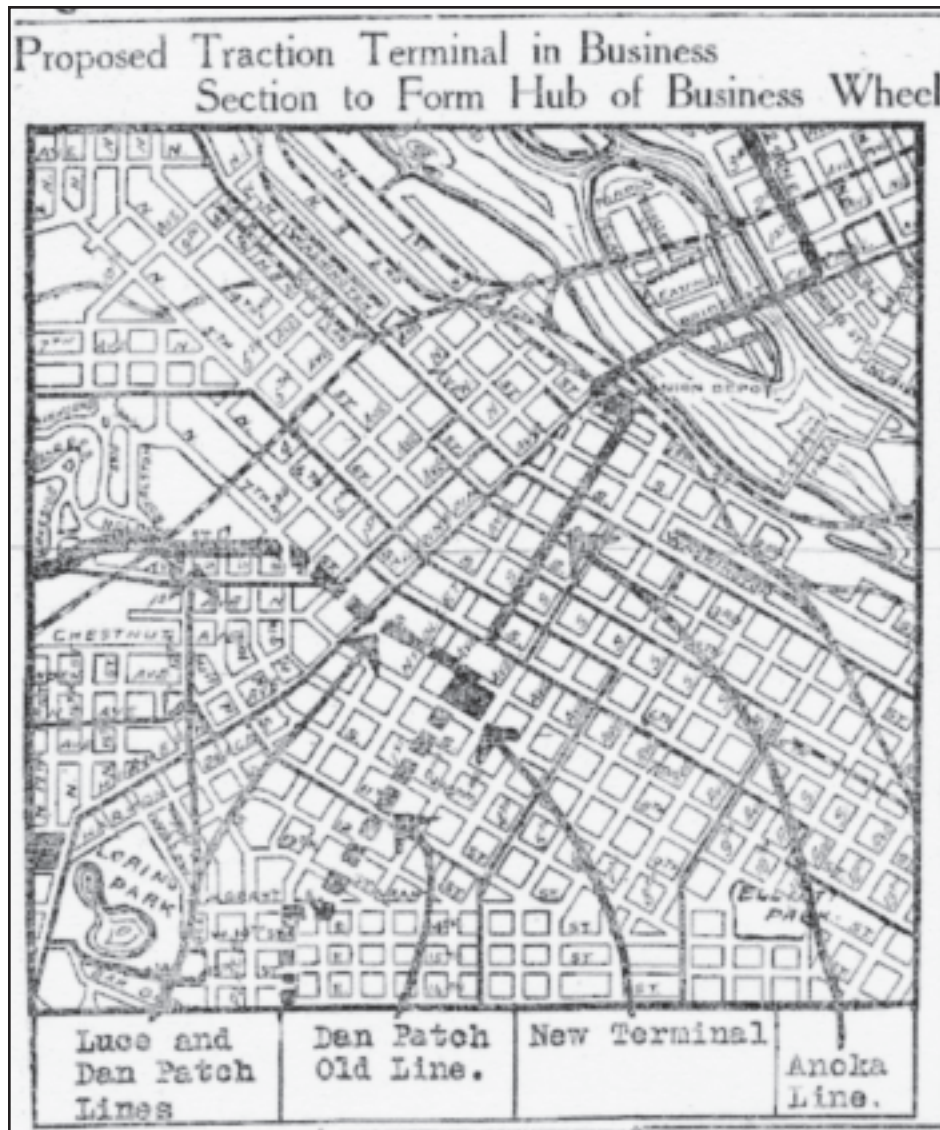
The Minnesota Railroad & Warehouse Commission record card states "License expired by law March 1, 1936. Secretary of State has no papers showing dissolution."

The Terminal Block

The streetcar era included a number of planned improvements that never came to pass. The period beginning about 1910 saw a large number of proposed interurban lines radiating from Minneapolis. This gave rise to the idea of a central traction terminal in downtown Minneapolis. It would have

occupied the entire city block bounded by 7th Street, Marquette Avenue, 8th Street and 2nd Avenue S. In fact, TCRT purchased the block for that purpose in 1915.

Apparently it wasn't intended just for interurbans. According to Interurbans 14, the first published history of TCRT, every streetcar entering



Above: This diagram appeared in Interurbans14.

Left: This prospective map appeared in the newspaper.

downtown was to have passed through the terminal. It also would have hosted the interurbans of the Minneapolis Anoka & Cuyuna Range, the Luce Line and the Dan Patch Line. The goal was to facilitate transfers between lines, which were spread all over downtown at more than a dozen

intersections. In some cases transferring passengers had to walk several blocks to make connections.

The terminal's proposed location reflected the shift in the center of downtown away from the Mississippi River. By the 1920s it moved from the area of Hennepin & Washington to 7th

Do You Know That You Can Save Money by Shopping at

The Terminal Block

This block is bounded by Eighth Street, Second Avenue South, Marquette Avenue and Seventh Street.

You will find some of the most attractive shops in Minneapolis in this block. Shop here and get the advantage of lower prices.

EIGHTH STREET	SECOND AVENUE	SEVENTH STREET
100 Story & Clark Flies.	710 Pure Oil Co. Filling Station.	100 E. Miller Tailor.
102 Carl Helms Candy Shop.	712 Grant-Langford Elec. Contractors.	102 McCulloch Barber Shop.
110 Mrs. F. A. Maple Millinery-Hats.	718 H. E. Hedge Lighting Fixtures.	104 A.G. Osterich Flume Co. Hats, Millinery.
112 E. Street Jewelry.	720 Anna W. Anderson Hats, Millinery.	111 Hatges & Sampson Shoe Mending.
114 Miss L. M. Davis Chinaware.	722 Osgood, Thon, Blair Shop Haird'r's, Shampoo.	113 P. H. Kaufhold Toiler.
116 L. M. Street Vacuum Cleaners.	724 Bealy & McMillan Ladies' Hat-Making.	115 Ideal Shoe Repair Elec. Shoe Repair.
118 Elm, La. New Co. Elec. Lt. Novelties.		117 J. H. Olson Haird'r's, Shampoo.
120 A. Loria Painting, Decorating.		119 L. L. Blanchard Real Estate.
122 Needlecraft Shop Needlecraft.		121 Fehle, E. Hensel Hand Painted Chime.
124 Misses Kierulff Haird'r's, Shampoo.		123 J. & J. Lattin Jewelers.
126 Misses Florsch Co. Flowers.		125 Carl T. Tupper Carpet Shop.
MARQUETTE AVENUE		127 Langdon Bros. Co. Fuel, Bricks.
702 D. K. Murphy Cigars, Magazines.		129 F. G. Torngren Tailor, Furnishings.
704 F. C. Felt & Tress Fuel, Transfer.		131 Mrs. A. K. Clark Hats, Millinery.
706 T. M. Hiner Sewing Machine.		133 John Garbner Grand Glycerin.
708 W. J. Moon Elec. Shoe Repair.		135 J. G. Viles Candy, Fruit, etc.
710 Towne Electric Shoe Repair.		
712 Oshman Lunch Restaurant.		
714 M. W. Olson Metal Sheet Metal.		
716 J. C. O'Grady Hotel.		
718 Womans McDonald La. Fuel, Plumbing.		
720 Marquette Lunch Restaurant.		
722 Price-Petersen Mech. Home Equip't.		
724 Jap Art & Nov. Imported Novelties.		

THE RAPID TRANSIT REAL ESTATE CORPORATION

See the Rental Agent at No. 1 Eleventh St. South regarding vacant stores.

& Nicollet. Housing along Marquette had receded, replaced by office buildings, culminating in the Foshay Tower in 1929. Development in this direction was assisted by the opening in 1920 of the 3rd Avenue bridge over the Mississippi.

This wasn't the first attempt at a downtown streetcar terminal, an idea that had previously been tried and discarded. In the 1890s streetcars were diverted via the original Loop to reach the transfer station at Hennepin & 1st Street. At the time TCRT and the City were trying to decide how to administer transfers between cars. They erroneously decided that transfers could only be permitted at the transfer station. Streetcars were diverted off-line to reach it and the result was congestion

and delay. Passengers complained about being dragged out of their way and TCRT spent extra money on streetcar mileage and off-car ticket agents. It wasn't long before transfers were allowed wherever lines crossed and the diversion to 1st & Hennepin was abandoned.

It appears that the coming of the interurbans after 1905 helped spur the call for the terminal. The Dan Patch had been trying unsuccessfully to reach downtown over the TCRT Nicollet Avenue line since 1910. The Dan Patch never electrified, and didn't reach downtown until a new line was built through the western suburbs. They finally arrived at the Luce Line's station at 7th & Hoag (near today's Target Center) in 1917. The Luce Line

had been there since 1913. The Minneapolis Anoka & Cuyuna Range reached downtown in 1915 and terminated at a storefront depot at 517 2nd Avenue S. TCRT's Lake Minnetonka cars, essentially interurbans, ended at another storefront on 6th Street between Hennepin and 1st Avenue N. Thus there were three interurban terminals scattered around downtown.

A 1913 newspaper story lists more proposed interurbans that were never built, and says the terminal would serve seven lines. The Minneapolis & Central Minnesota was proposed to build through Monticello to St. Cloud. Minnesota Union Electric Railways also intended to build to St. Cloud, then on to South Dakota. The Minneapolis & Northern, which did build to Anoka and later became the MA&CR, was supposed to extend to Lake Mille Lacs. A line dubbed the Garden Belt Route was to have been built to Brooklyn Center. Finally, the Twin Cities & Lake Superior had proposed a high speed third rail electric line between Minneapolis and Duluth.

Just as cities preferred joint or "union" depots for passenger trains, they wanted the same for this new innovation in passenger rail. Even better if interurban passengers could transfer to local streetcars without leaving the same building.

As proposed, the terminal would be completely encircled by track, allowing streetcars to arrive and leave in any direction. As of 1915, however, there was track on only the Marquette side of the block. Track was built on 8th Street and 2nd Avenue S. in 1920, bringing the important Chicago-Penn-Fremont line to the site. The track proposed for 7th Street was never built.

It's unclear why the terminal didn't happen, but we can speculate. It may have been sidelined by the distraction of World War I, which strained TCRT's

resources. Given its 1890's experiences with the original Loop, TCRT probably was in no hurry to spend the operating dollars required to divert every car line through the terminal. By 1920 Minneapolis ridership had increased 28 percent over 1915 and the terminal probably would have become a huge bottleneck.

In the end, the promised interurbans were never built. The Luce Line and Dan Patch never electrified, and their gas powered railcars couldn't handle the curves in and out of the terminal. The Anoka line ridership was modest at best, and in 1923 it moved into the joint Luce Line/Dan Patch terminal, essentially solving part of the problem. Intercity buses were now the growth industry and their terminal at 7th Street & 1st Avenue N. was only a couple of blocks from the joint interurban terminal. The TCRT Lake Minnetonka terminal was moved to the bus terminal in 1928. By that time streetcar ridership was already falling because of rising auto ownership. The terminal's time had passed.

Trolley Bus Wire

-Cliff Johnson, Duluth Street Railway Engineering Department

From Transit Topics, August 1934

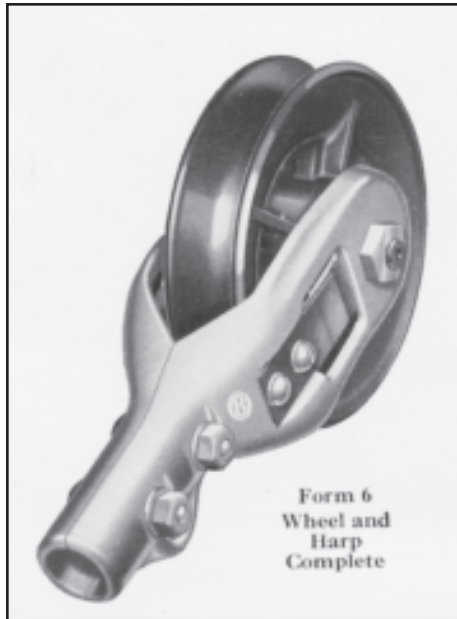
This excerpt from the Duluth Street Railway passenger newsletter gets into some rather arcane features of trolley bus overhead wire. It explains how it differs from streetcar overhead. The most obvious difference, of course, was having two wires instead of one, with the second wire replacing the track as the negative power return. Wood insulators spaced the wires 24 inches apart. While the streetcars had trolley wheels that rolled along the underside of the overhead wire, the buses used U-shaped trolley shoes that slid. They were

attached to the trolley pole with a swiveling harp that allowed the buses freedom to move out from under the wire, most often to load and unload at the curb. Since DSR sometimes ran streetcars and trolley buses on the same streets under the same wires, some compromises were needed to make both work.

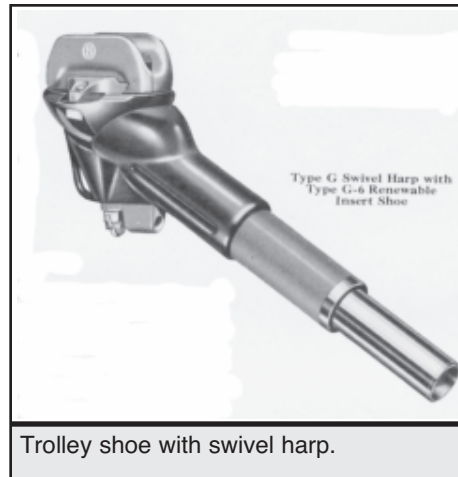
The technical illustrations come from our library's 1940 catalogue of Ohio Brass, which supplied the industry with overhead wire components.

The question often arises as to the relative advantages of the trolley shoe over the trolley wheel.

For normal city operation where relatively low amperages are collected and where a round trolley wire is used, the wheel appears superior to the shoe due to the fact that mechanical friction is the principal cause of wear, and the mileage obtained from wheels is greater than that obtained from shoes.



For trolley bus operation, however, other problems enter the picture. When the first buses came into use,



wheels with swivel harps were tried, but they came off the wire too easily. The ability of the shoe to cling to the wire while turning out and when running under special work soon became apparent, and it superseded the wheel.

The earlier installations used a round trolley wire. For shoe operation this had some serious disadvantages. The clinch ears and splicers used with round wire offered obstructions to the shoe which resulted in abnormal wear of both the shoe and the wire.



Clinch ears (above) held the overhead wire in place. Splicers (below) were needed to hold two wire ends together.



This difficulty was solved by changing from a round wire to a grooved wire. With a grooved wire a far

smoother underrun is obtained at all the overhead fittings. Our company was the first to use grooved wire for this type of operation.

An interesting fact is that the negative shoe wears faster than the positive one. This is a simple electrolytic condition and the reason for this is that the current in flowing from the shoe and places in on the wire. The principle is similar to that used in the electroplating process. This action roughens the negative shoe somewhat and wears the negative wire considerably faster than the positive wire.

The shoe is a better current collector than the wheel on account of having a larger area in contact with the wire. This results in less arcing and burning of the wire and decreased radio interference.

Wire lubrication

For shoe operation the wire has to be lubricated periodically. This is an added maintenance expense for our property.

We are experimenting with a new lubricant which appears to be very satisfactory. It consists of a finely powdered graphite which is mixed with a special bonding fluid. When applied to the wire the fluid evaporates in 60 seconds and leaves the wire coated with graphite. This should eliminate some of the trouble we have had with the lubricant dripping on the top of the buses.

The lubricant will not rub off readily, is insoluble in water and is a good conductor of electricity. The amount of lubricant required depends upon the condition of the wire, but we expect a gallon of lubricant to cover approximately eight miles of single wire.

We have purchased a new lubricating outfit which consists of a trolley harp, trolley shoe and a trailing lubri-

cant reservoir in which is mounted a roller. As the roller revolves the lubricant is rolled on the wire. Splashing and spilling is practically eliminated with this outfit. It fastens onto two trolley poles which are mounted to one of our trucks similar to the outfit we have been using on the Lester Park line.

Perhaps some comment on what has been done in constructing the new trolley bus overhead will be interesting to those unfamiliar with the work. The majority of the overhead fittings are entirely new, having been designed especially for trolley bus use. I might mention some of the outstanding features of the new fittings.

Spring ears



First, there is the new ear, to which the trolley wire is attached to the span wires. A steel spring is fastened to the body of this ear in such a way that the weight of the trolley wire bows the spring slightly downward. The purpose of the spring is to absorb the shock of the shoe as it passes under the ear. This ear, in turn, is fastened to a hanger of a new design. The arms, or outriggers, on this hanger are made adjustable so as to compensate for the angle of the span wire. Without this feature the span wires next to the poles usually tilt the hangers and cause side wear on the ears. These hangers are very well insulated and require no additional insulation between the positive and negative wires.

At all intersecting points, and at wyes, overhead special work is, of course, required. Where a positive

wire crosses a negative wire a fiber beam is placed on one side of one of the wires to insulate it. These insulated spacers and "approaches", as they are called, are dead spots in the wire, much the same as section insulators on street car trolley wires. Power should be thrown off while passing under them. If this is not done a large flash occurs that naturally burns the overhead fittings. This fire, resulting from the breaking of an electric current, also means some power loss.

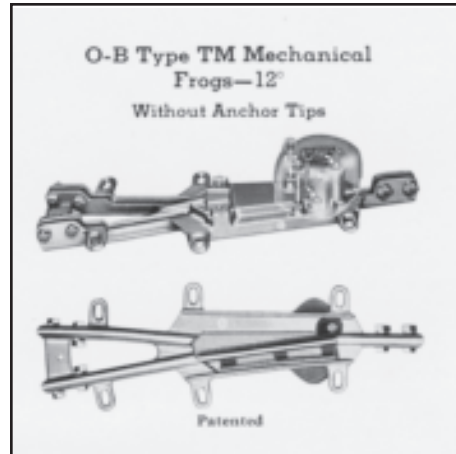


Overhead switches

Our overhead switches, or frogs, are of four different types: trailing, spring, mechanical and electrical. The trailing frog is similar to many of the frogs we already have and is only used for trailing operation.



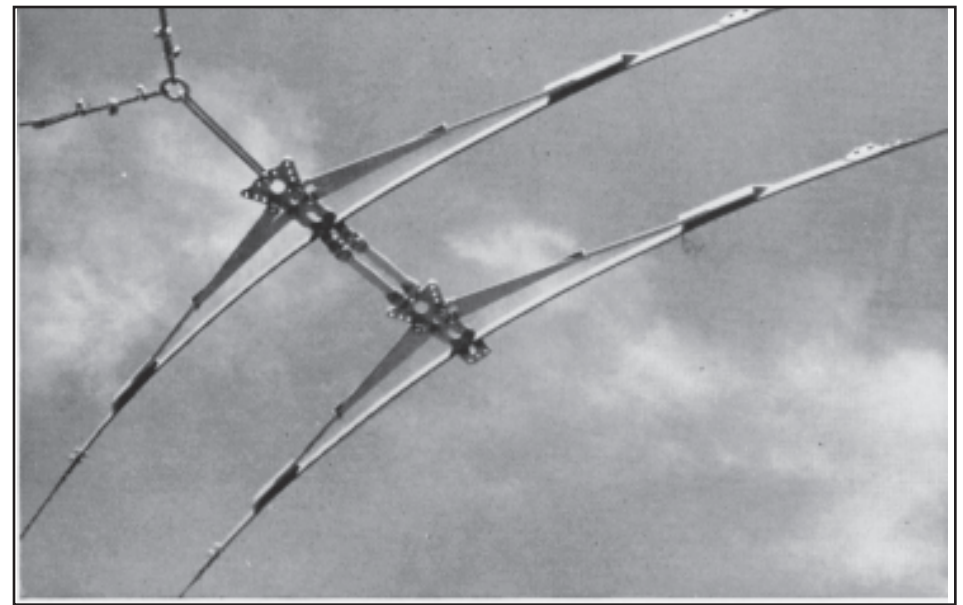
The spring frog has a movable tongue and is used in the point of wyes, etc., where a pull-in and back-out operation or vice versa is required.



The mechanical frog is used where we have street car operation in two directions and trolley bus operation in any one direction on the same wires. The movable tongue in this switch is set for a certain desired trolley bus operation and the tension of this tongue is so adjusted that the rigid harp and wheel of a street car can force the tongue to the direction in which the car is travelling. Care should be used when passing under these frogs, as too fast operation may cause a dewirement.

The electric frog operates similar to our electric track switches, that is, the desired direction can be obtained by a power-off or power-on application.

We have one of the electric frogs at the entrance to the 8th Avenue W. loop.



Curves could be handled the old fashioned way with pulloffs (below right), or with solid pieces (above) that connected straight sections as shown below left.



We have mechanical switches at the following locations: 25th Avenue W. and Superior Street, westbound; 21st Avenue W. and Superior Street, both

west and eastbound; and Garfield Avenue and Superior Street, both west and eastbound.

Service with a smell

- Otto Hogan

We recently received this anecdote from member David Hogan, who got it from his grandfather.

In order to make the picture clear to those who never saw or rode on the Incline and for those who have forgotten what it was like, I will endeavor to explain it. I feel qualified to do this as I lived on Duluth Heights for 84 years before moving to Mount Royal Pines. If my figuring is correct I rode the Incline just a little over or under 5,000 times.

The Incline ran up 7th Ave. West from Superior Street to 8th Street. There were two cars on two sets of parallel tracks just far enough apart to hold five stations about four feet wide between them. These stations were not exactly on any street crossing, but were called 2nd St, 3rd St., 4th St., 5th St., and 7th St. These stations had doors on both sides which were opened by the conductor after he had opened the car door. When the upbound car was at 2nd, the downbound car was at 7th, and when the upbound car was at 3rd the downbound was at 5th. They both arrived at 4th at the same time. This was handled by the operator who was stationed in a small building at the top of the hill. He watched an arrow about 16 inches long that kept going around on a large flat circle about three feet across. There were a number of marks along the outer edge of this circle and each mark indicated a stop for a station, and the tip of the arrow had to be exactly on the mark when stopped. The conductors reported to the operator by telephone when their car was ready to leave a station by saying "East car clear" or "West car clear".

The streetcars to Duluth Heights

started about 50 feet from where the Incline discharged its passengers and ran up Highland Ave. to Mulberry St. Mulberry St. is the intersection where the Duluth Heights Community Club building stands and where the Swan Lake Road has its beginning. The name Highland Ave. no longer exists. From Mulberry to Orange St. it is now part of Basswood Ave. and the rest of the road all the way to 8th Ave. West and 9th St. is now part of Orange St.

The street car line was called the Highland Ave line. It was composed of two cars, one of which was used to provide one half hour service from a little after 5 a.m. to close to one a.m. The second car was kept in a barn at the top of the hill and was used to increase the service to fifteen minute for about three hours each in the morning and evening rush hour. There was a siding about half way up the line where the cars would meet. Going downtown the half hour Highland car always made connections with the fifteen minute Incline. Going home, however, except during rush hour service, passengers on the every-other Incline had a short layover at the top.

Now that you know where you are, we will get to the meat of our story. A man who had been an immigrant from a southern European country, obviously some time back, as he spoke reasonably good English and had a large family, moved into a dilapidated shack on the Heights. He was supposed to have experience in tree husbandry and had a job with the city Park Department. For fear that he may still have descendants living in Duluth, even possibly in the Pines, we would not want to cause them embarrassment so we will just call him Tony. Tony was a nice enough fellow in his way but he had one bad habit. He thought of skunk meat as being absolutely delicious. (Who can say that



The incline cars meet at the 4th Street stop, allowing Tony to switch cars and skunk them both.

it is not?). He did not miss an opportunity to acquire some. The opportunity presented itself one fine afternoon. Tony saw a skunk that made the mistake of coming out in daylight. The skunk was polite enough to be willing to leave the neighborhood as peaceful as he had found it but looking over his shoulder and seeing Tony bearing, down on him like a freight train, he decided that it was time to take things into his own hands. I don't know how many faucets a skunk has, but he turned them all on and let Tony have it. Tony obviously expected what he got, for this did not deter him in the least. He kept right on course until he had his dinner in hand. But Tony was dripping. You all have complained about the smell of a skunk a half block away. Tony was not a half block away, he was right there.

Toward the end of the afternoon, Tony decided that he had to go downtown for something. He took the street

car on the Heights and eventually changed to the Incline at the top of the hill. By this time Tony began to realize that the other passengers were all talking about him and moving away as far as possible. So, what could he do? He got off at 4th St, crossed over the four-foot wide station, got on the upbound car where he had to pay another nickel. The rush hour fifteen minute schedule was now in effect so the Highland car that Tony had come down on had gone back to the Heights and a nice clean car was waiting for passengers from the Incline. Tony had hit the jackpot. On his short trip he had smelled up all four cars of the Incline and Highland car lines.

I mentioned earlier in this story that there was a time that the customers were not always happy with what they had to put up with. How you know that all they were complaining about was SERVICE WITH A SMELL.

The Snelling Crosstown

For the first 30 years of the streetcar system, there no such thing as a crosstown line in the Twin Cities. Every line radiated from one of the two downtowns, which means that in the neighborhoods they paralleled each other. Anyone wanting to make a crosstown trip had to travel downtown and transfer. It was slow and indirect. For example, a trip from Lake & Chicago to Lake & Hennepin, a distance of less than two miles, took about 45 minutes, slower than walking.

That changed in 1905. In Minneapolis the Lake Street line opened from Hennepin Avenue to 31st Avenue. In St. Paul a shorter crosstown opened on Snelling Avenue from Como Avenue to Grand Avenue, connecting lines on Como, Minnehaha, University, Selby and Grand.

The new crosstowns opened up all sorts of new trip options, increasing ridership on the pre-existing radial routes as well.

The track was extended a mile south on Snelling to Randolph in 1909, where it connected with an extension of the Randolph Avenue line. The Randolph and Snelling lines were merged end-to-end, extending from Como & Snelling to downtown via 7th Street, then beyond to the East Side via the Hope Street line.

In 1915 the St. Clair Avenue line was built, creating yet another connection to the Snelling Crosstown. St. Clair was through routed with Hope Street, so Randolph began terminating at Duluth Avenue Station at East 7th & Duluth. That lasted for two years, when the east terminus was extended to Hazel Park, which Randolph cars would continue to serve until abandonment in 1952.

1916 saw the extension of the Randolph line west of Snelling a mile to Cleveland Avenue. For five years it operated as a shuttle and the regular Randolph cars continued to travel up Snelling to Como.

Snelling became a separate line again in 1921, when the Randolph cars began through service to Cleveland.

To serve new residential development west of Como Park, in 1924 the Snelling line turned east onto existing Como-Harriet track for a quarter mile to Pascal Street, then north to Arlington Avenue. It was further extended in 1927 east to Hamline Avenue and north again to Hoyt Street, the city limits. That same year the south end of the line was extended to Highland Parkway. The crosstown was now at its greatest extent.

The Snelling Crosstown settled down to a routine that would last until abandonment in 1952. Rush hour frequency was every 5 minutes, 10 minutes during midday and evenings. It now connected with 7 streetcar lines, plus bus lines at each end. Although it carried as many passengers per car mile as the radial lines, passengers boarded and alighted continuously along the line, so the car seldom filled up. It was assigned lightweight cars, always a sign that TCRT viewed the line as somewhat light duty.

That changed during the State Fair,

when extra Snelling cars were added. Carrying Snelling to Como and Fairgrounds signs, they turned west on Como to end at the fair streetcar terminal.

Beyond its revenue service role, the Snelling line was useful for non-revenue moves, because Snelling Station and Shops was located on it at University Avenue. Snelling Station crews ran on the Selby-Lake, Grand Avenue, St. Clair and Randolph lines. They pulled their cars out and in via the Snelling line, and the crews rode the crosstown cars to relieve each other on the line.

Cars repaired at Snelling Shops used the crosstown line for break-in runs. And just after 3 PM, a special car for shop employees left the shop yard and traveled down Snelling to Selby, where it turned right to head across south Minneapolis.

The Snelling line was converted to bus on September 6, 1952.

Here's a trip from the south end to the north end.



A southbound car turns into the Highland Parkway wye.



Layover was on Snelling just south of Highland. Note the Highland water tower. St. Paul Pioneer Press-Dispatch photo, Minnesota Historical Society collection.



Above right: Snelling and Randolph.
 Right: Snelling and St. Clair. In both
 photos, note the curving tracks used for
 deadhead movements to/from Snelling
 Station. Both Minnesota Historical
 Society collection.



Above: A northbound car has just crossed over the Selby-Lake line at Selby Avenue.

Below: The Milwaukee Road's "Short Line" between the downtowns passed over the intersection of Snelling and Marshall, visited here by a work car and a regular service car. All Wilbur Whittaker photos.





Left: A pullout for the Grand Avenue line heads south on Snelling, with the shops in the background. Above and below: Two views of Snelling & University. Left and below: Norman Rolf photos.





Above: A crane car travels south on Snelling at Lafond. There's still a barber shop in the same location. Wilbur Whittaker photo.

Below: A southbound car approaches Minnehaha Avenue, transfer point to the Hamline-Cherokee line. Bob Mehlenbeck photo.



Above: This is also Minnehaha and Snelling, looking south. Note the switch to access the Hamline-Cherokee line. Bob Mehlenbeck photo.

Below: A lightweight boards in front of Hamline University. Wilbur Whittaker photo. Opposite: Snelling used to cross the Northern Pacific south of Como Avenue at grade. Perhaps a train has derailed, causing this backup. Note that the streetcar tracks narrow to one for the crossing, a common practice. St. Paul Pioneer Press-Dispatch photo, Minnesota Historical Society collection.







Above: A Snelling car turns off Como, where it shared track for a quarter mile east to Pascal with the Como-Harriet line. Norman Rolf photo.
Below: A plow clears Arlington Avenue at Sheldon Street, just west of Como Park. Gene Corbey photo.



Above: This is also Arlington at Sheldon, looking east.

Below: The terminal at Hamline and Hoyt, the city limits of St. Paul and Falcon Heights. Here the Snelling line met a shuttle bus that connected it with the north end of the Dale Street line. Both Gene Corbey photos.





During the State Fair extra Snelling Avenue cars turned left at Como Avenue and terminated at the fairgrounds streetcar terminal.

Left: A switchman was assigned to manually route the cars into the terminal.

Below left: On the St. Paul loop in the terminal. The car is carrying Snelling to Como signs.

Below right: This is actually a Como-Harriet car. It will pull through the terminal loop, then continue into St. Paul. Note the Royal American Shows train stored in the background.

All Norman Rolf photos.





This photo was part of a group that included this issue's front cover. Taken in 1891, it shows a Minneapolis-bound open car at Lake Harriet. The surprise to historians is the carrousel. Note that the tracks have not yet been elevated to the level of Queen Avenue.



MINNESOTA STREETCAR MUSEUM

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